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UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
Forestry Sciences Laboratory
P.O. Box 887
Corvallis, Oregon 97330

REPLY TO: 4500 Forest Insect Research

June 17, 1970

SUBJECT: Tussock moth in Arizona

TO: Boyd E. Wickman
Principal Insect Ecologist

Listed below are our estimates of tussock moth population density at Aztec Peak, Arizona as determined on June 2 and 3:

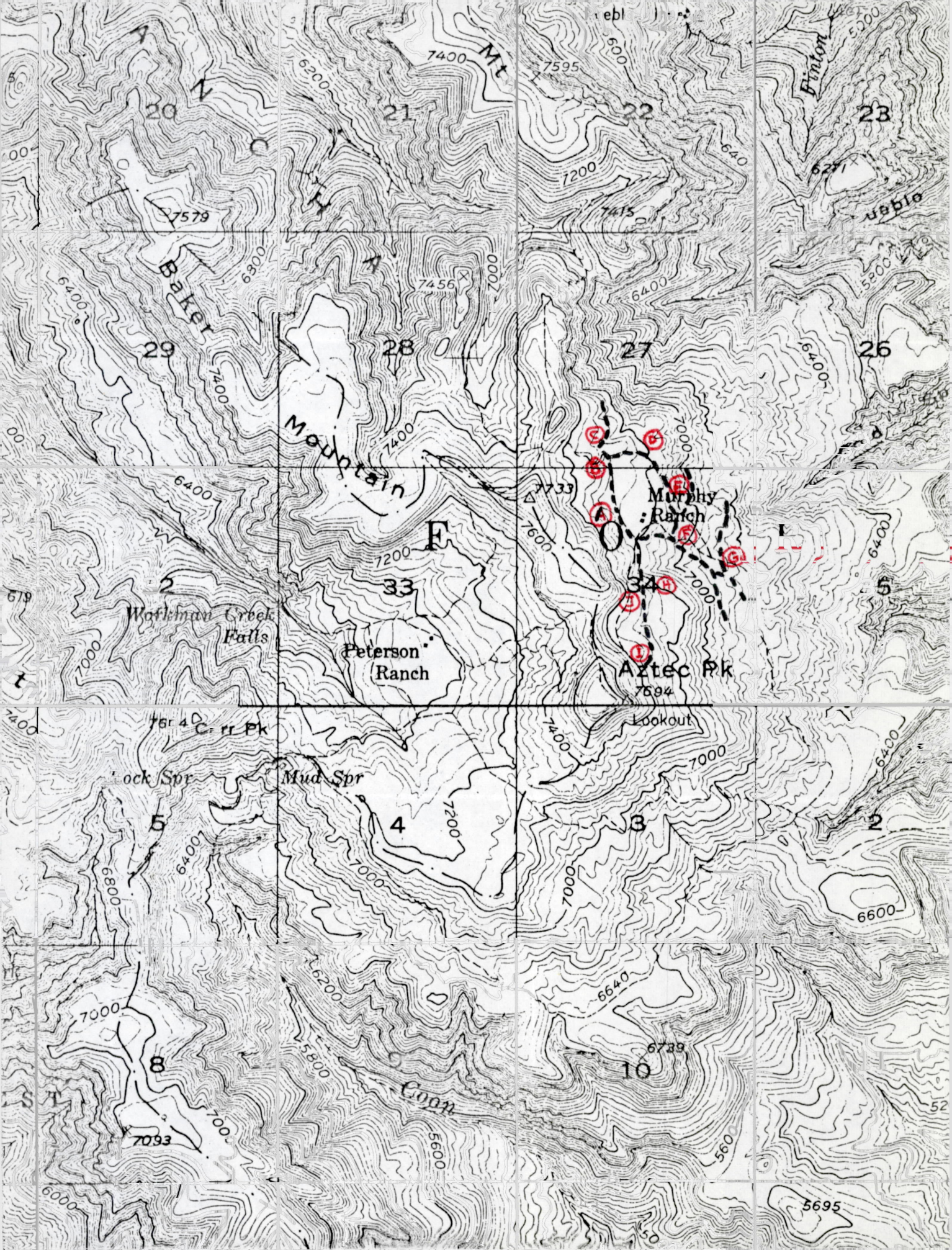
Sample Point	Mean number of larve per M sq. in.
A	1.71
B	2.40
C	2.33
D	1.49
E	0.28
F	1.09
G	2.47
H	5.78
I	3.72
J	10.27
Mean	3.54

Most larve were in the first instar when sampled in the field. Sample points A through G declined sharply from their outbreak level of one year ago, but the population did not completely collapse from virus disease as we had expected. Three sample points (H, I & J) which formerly contained very light populations actually increased or remained static. Population levels at points A - G are now roughly similar to the low levels in June 1967 when monitoring was first initiated.

These results raise a number of interesting questions regarding virus epizootiology and tussock moth dynamics. Our data is unique in so far as no other tussock moth population has been monitored for this length of time. To answer some of these questions the population at Aztec Peak should continue to be monitored each June until we are able to establish a pattern of oscillation or until the population drops to a level too low to measure satisfactorily. I suggest we seek funds of approximately $600 annually to cover expenses for this work.

Richard R. Mason

RICHARD R. MASON
Insect Ecologist


Baker
Mountain
Murphy Ranch
Aztec Pk
7694
Lookout
Peterson Ranch
Workman Creek Falls
Mud Spr
Coon
Finton
Mt
7579
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7595
7415
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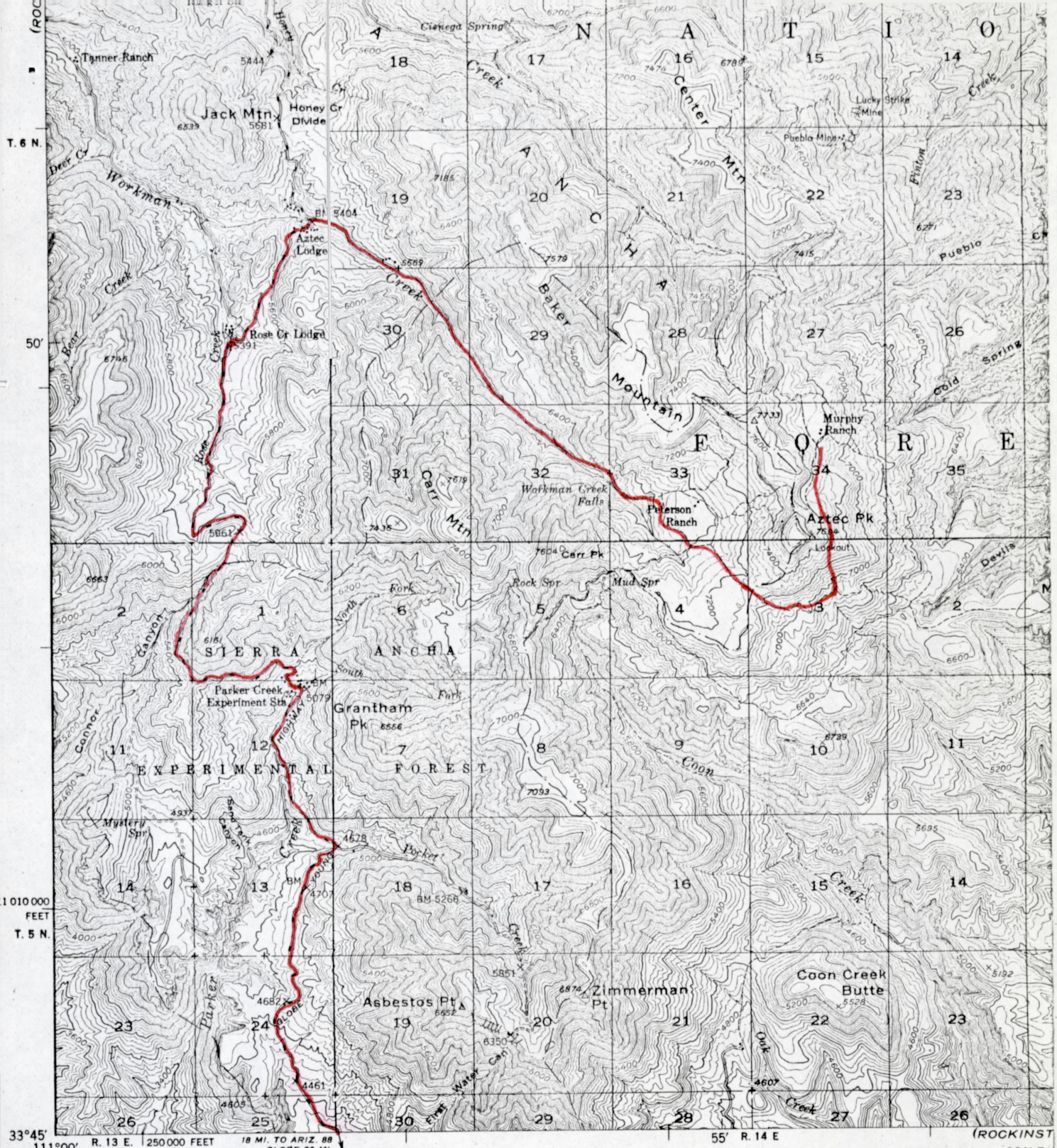

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Topography from aerial photographs by multiplex methods
Aerial photographs taken 1947. Field check 1949

Polyconic projection. 1927 North American datum
10,000-foot grid based on Arizona coordinate system, east zone

Unchecked elevations are shown in brown

14°
TRUE NORTH
MAGNETIC NORTH
APPROXIMATE MEAN DECLINATION, 1949

SCALE

1 0 1

3000 0 3000 6000

1 5 0 1

CONTOUR INTE
DATUM IS ME

THIS MAP COMPLIES WITH NATIO

FOR SALE BY U. S. GEOLOGICAL SURVEY, FEDERAL CE
A FOLDER DESCRIBING TOPOGRAPHIC MAPS